

Northern California

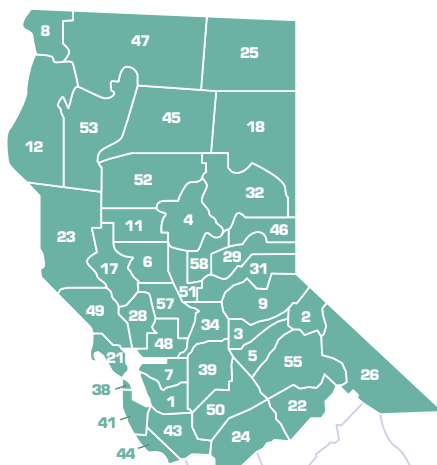
General Statistics



- Collision with another vessel was the most common type of accident, accounting for 28% of all Northern California accidents, compared with 45% in Southern California and 36% statewide.

- Inexperience and inattention each accounted for 34% of accidents in Northern California and were the most common causes of accidents.

- PWC were involved in 23% of all Northern California accidents, compared with 33% in Southern California and 28% statewide.



Includes accident statistics for the following Counties:

- | | | |
|-----------------|-------------------|----------------|
| 1. Alameda | 22. Mariposa | 44. Santa Cruz |
| 2. Alpine | 23. Mendocino | 45. Shasta |
| 3. Amador | 24. Merced | 46. Sierra |
| 4. Butte | 25. Modoc | 47. Siskiyou |
| 5. Calaveras | 26. Mono | 48. Solano |
| 6. Colusa | 28. Napa | 49. Sonoma |
| 7. Contra Costa | 29. Nevada | 50. Stanislaus |
| 8. Del Norte | 31. Placer | 51. Sutter |
| 9. El Dorado | 32. Plumas | 52. Tehama |
| 11. Glenn | 34. Sacramento | 53. Trinity |
| 12. Humboldt | 38. San Francisco | 55. Tuolumne |
| 17. Lake | 39. San Joaquin | 57. Yolo |
| 18. Lassen | 41. San Mateo | 58. Yuba |
| 21. Marin | 43. Santa Clara | |

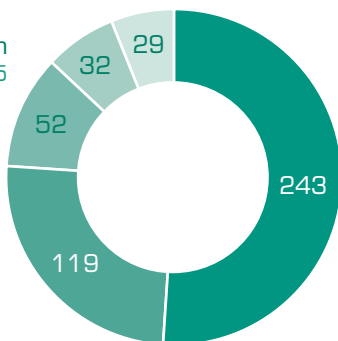
Northern California is defined as North of the Fresno and Monterey Bay areas (including Monterey Bay).

- PWC were involved in 4% of fatalities in Northern California, compared with 24% of fatalities in Southern California.
- 23% of Northern California accidents occurred during the three summer holiday weekends.
- Open motorboats were involved in 57% of all accidents in Northern California, compared with 44% in Southern California and 51% statewide.
- In Northern California, vessels capsizing accounted for 37% of boating fatalities, followed by victims falling overboard, which accounted for 33% of fatalities.
- 67% of victims who died in fishing-related boating accidents were boating in Northern California.
- 70% of victims drowned and 11% died of trauma-related injuries in Northern California, compared with 52% and 48% respectively in Southern California.
- In Northern California, 40% of victims died in alcohol-related accidents, where testing could be conducted.

General Statistics

2002 Northern California Boating Accidents by Location

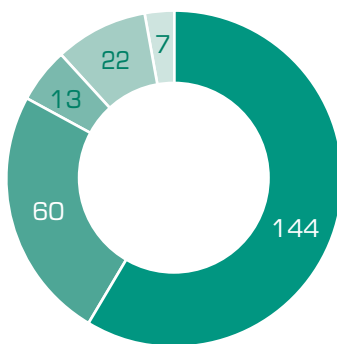
Accidents by Location
Total Accidents = 475



- Lakes
- Delta
- SF Bay Area
- Coastal Waters
- Rivers



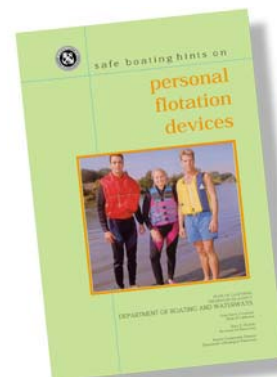
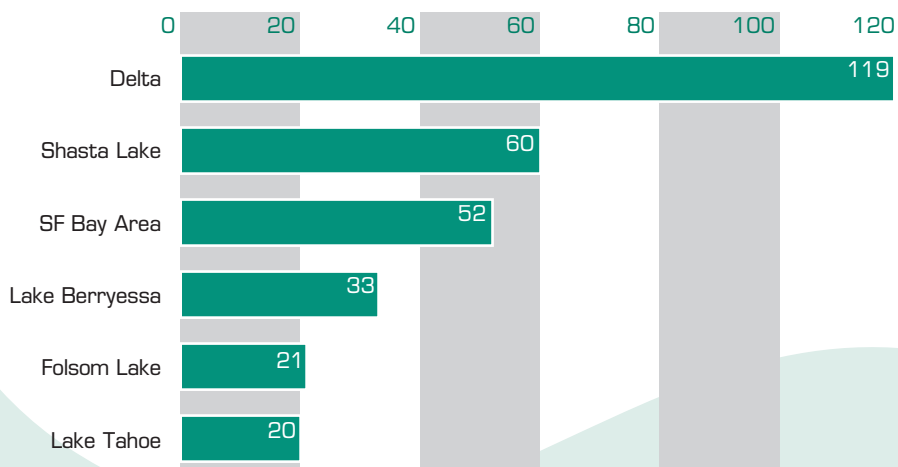
Injuries by Location
Total Injuries = 246



Fatalities by Location
Total Fatalities = 27



Top Northern California Boating Accident Areas



California Delta

Summary Statistics



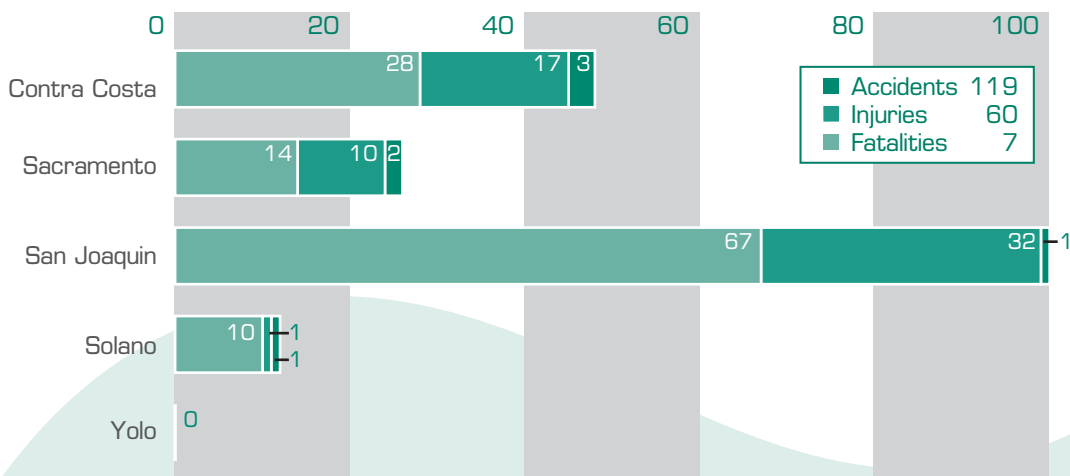
The Sacramento/San Joaquin Delta accounted for 25% of boating accidents, 17% of injuries, and 24% of fatalities in Northern California.

Additionally, the Delta accounted for 13% of all accidents, 13% of all injuries, and 13% of all fatalities in California.

Most operators involved in accidents were from the immediate local area, followed by operators from neighboring areas.



2002 Delta Boating Accidents by Location



Noteworthy Accident Statistics



Accidents Involving	Delta	Nor CA	CA
Types			
Collision with Object	12%	7%	6%
Grounding	24%	13%	11%
Type of Vessel			
Cabin Motorboats	26%	14%	16%
Open Motorboats	61%	57%	51%
Personal Watercraft	13%	23%	28%
Vessels that were			
Operated by Owner	59%	54%	51%
Operator Age			
Under 18	3%	8%	10%
40 and Under	51%	58%	62%
Over 40	49%	42%	38%



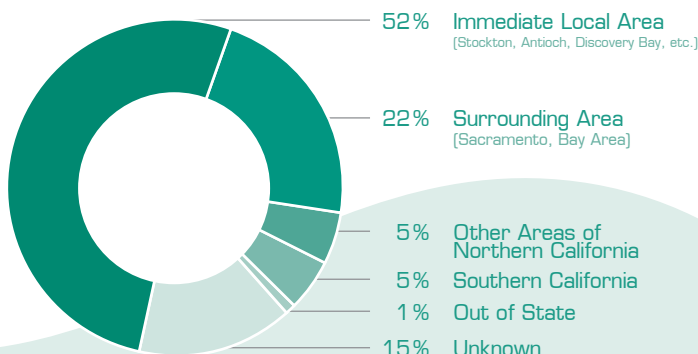
Accidents involving vessels grounding or colliding with fixed, floating, or submerged objects were more likely to occur in the Delta.

Accidents involving open motorboats and cabin motorboats were involved in a higher percentage of accidents than in Northern California or statewide. Conversely, PWC were involved in only 13% of accidents, a percentage significantly lower than Northern California or statewide.

Operators under 18 years of age accounted for only 3% of operators involved in accidents in the Delta. Unlike other bodies of water in California, the numbers of operators above and below 40 years of age were nearly equal.



Residence of Operators Involved in Accidents



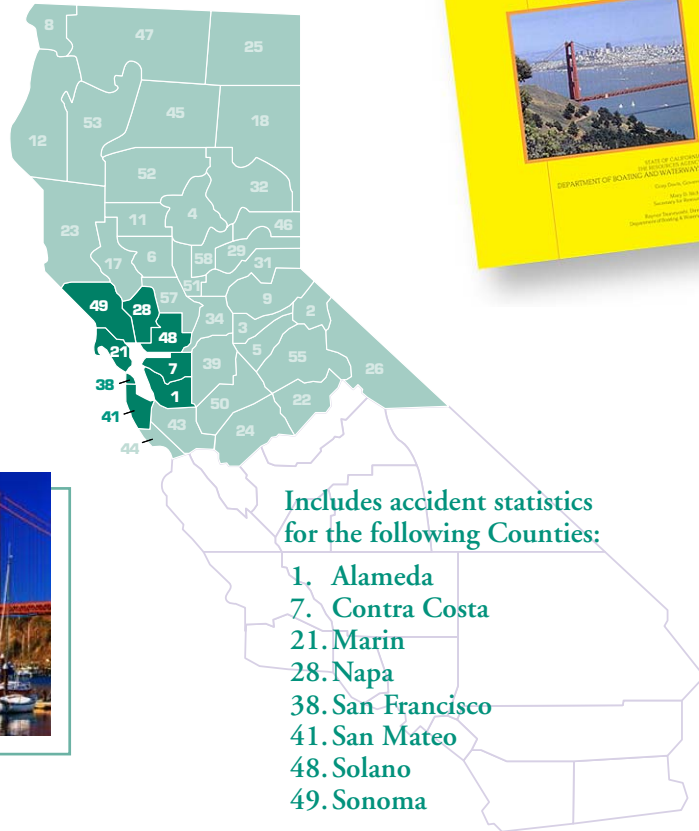
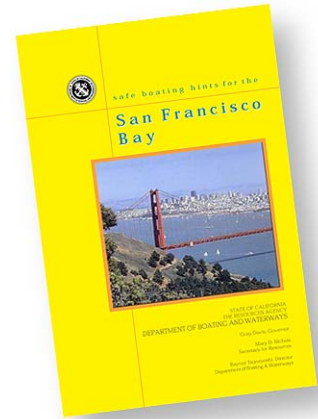
San Francisco Bay Area and Surrounding Coastline

Summary Statistics

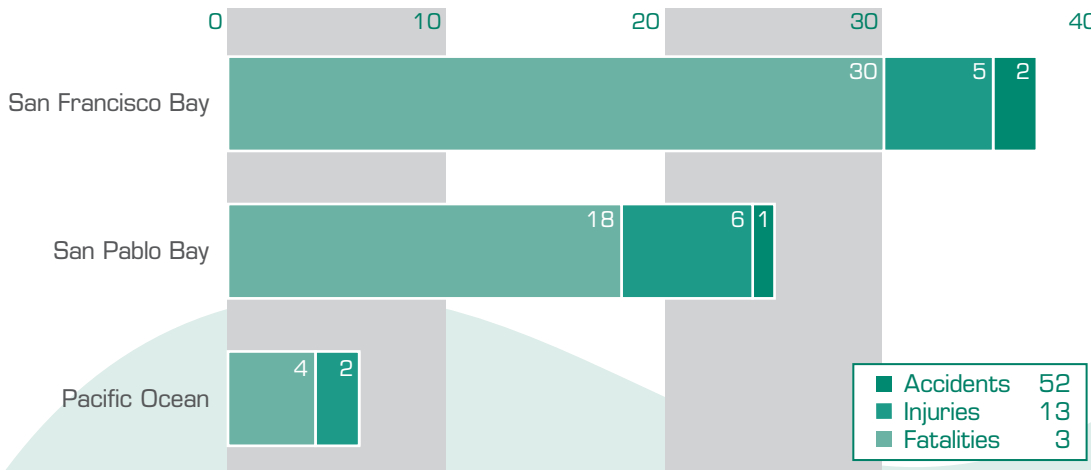


The San Francisco Bay Area accounts for 8% of Northern Californian boating accidents.

* The San Francisco Bay Area includes San Francisco and San Pablo Bays, as well as the San Mateo and San Francisco County Coastlines and the Marin County Coastline north to Point Reyes.



2002 San Francisco Bay Area Boating Accidents by Location



Noteworthy Accident Statistics



Accidents Involving	SF Bay Area	Nor CA	CA
Types			
Fires	19%	7%	6%
Grounding	25%	13%	11%
Type of Vessel			
Auxiliary Sailboats	35%	6%	10%
Cabin Motorboats	33%	14%	16%
Personal Watercraft	2%	23%	28%
Vessels that were			
Operated by Owner	67%	54%	51%
Operator Age			
Over 40	61%	42%	38%

59% of operators involved in accidents in the San Francisco Bay area were from local areas.

The majority of boating accidents in the San Francisco Bay area involved operators who were over 40 years of age. 67% of operators involved in accidents were also the owners of the craft.

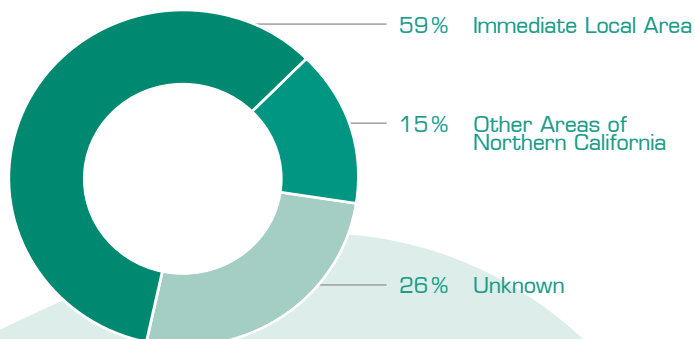
Grounding was the most common type of accident.



Accidents involving auxiliary sailboats and cabin motorboats were much more common than in other areas of Northern California.



Residence of Operators Involved in Accidents

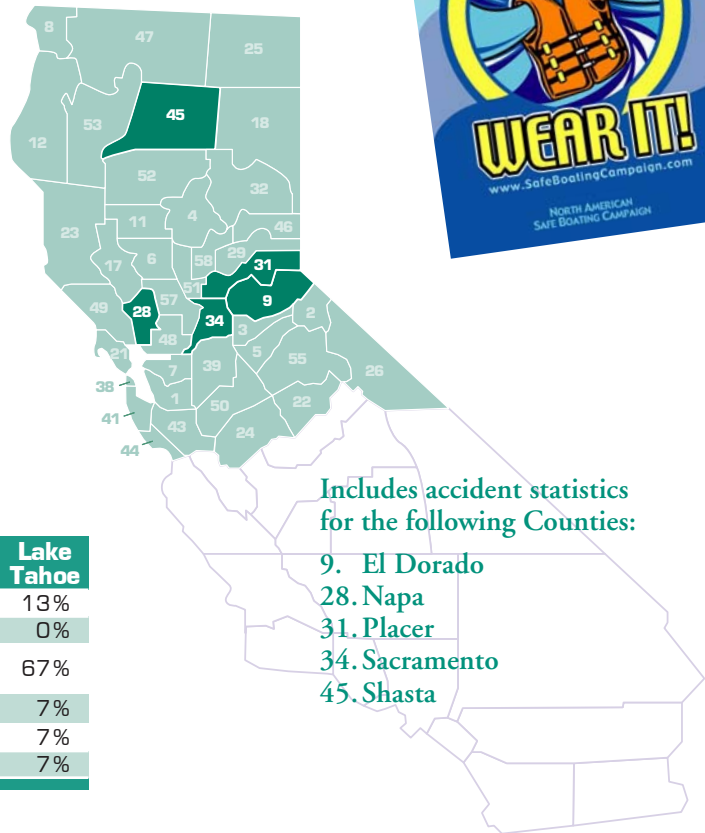


Northern Lakes

Summary Statistics



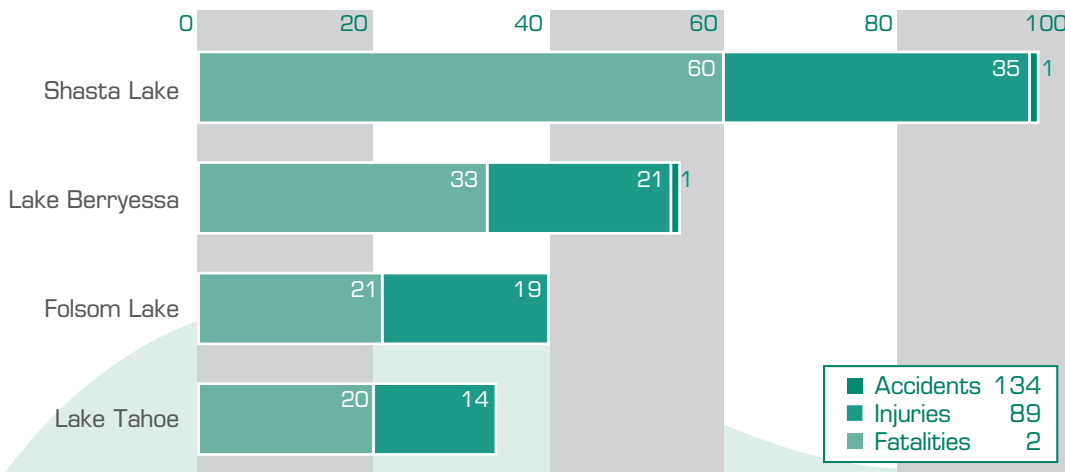
56% of accidents in Northern California occurred on lakes. Information concerning the lakes with the largest number of boating accidents is included here.



Residence of Operators Involved in Accidents

Area	Shasta Lake	Lake Berryessa	Folsom Lake	Lake Tahoe
Immediate Local Area	10%	20%	73%	13%
Surrounding Area	3%	18%	18%	0%
Other areas of Northern California	38%	55%	0%	67%
Southern California	1%	0%	0%	7%
Out of State	37%	0%	0%	7%
Unknown	5%	7%	9%	7%

2002 Northern Lakes Boating Accidents by Location



Noteworthy Accident Statistics



Accidents Involving	Shasta Lake	Nor CA	CA
Types			
Water Skiing	32%	14%	13%
Type of Vessel			
Houseboats	20%	7%	4%
Open Motorboats	65%	57%	51%
Personal Watercraft	25%	23%	28%
Vessels that were			
Rented	33%	10%	10%

Accidents involving water skiing activities, houseboats, open motorboats and rented vessels were much more common on Shasta Lake than either regionally or statewide. A significant number of operators involved in accidents were from out of state.



Accidents on Lake Berryessa were more likely to involve PWC and operators 40 years of age and under, and occur on holiday weekends. Additionally, accidents occurring during water skiing activities were also common.

Accidents Involving	Lake Berryessa	Nor CA	CA
Types			
Water Skiing	19%	14%	13%
Type of Vessel			
Personal Watercraft	31%	23%	28%
Operator Age			
40 and Under	71%	58%	62%
Causes			
Holiday Weekends	39%	23%	23%

Accidents Involving	Folsom Lake	Nor CA	CA
Types			
Collision with Vessel	57%	28%	36%
Causes			
Excessive Speed	57%	24%	27%
Operator Inattention	67%	34%	38%
Operator Inexperience	67%	34%	36%
Type of Vessel			
Personal Watercraft	76%	23%	28%
Operator Age			
Under 18	27%	8%	10%
40 and Under	87%	58%	62%
Other Factors			
Holiday Weekends	29%	23%	23%

Accidents on Folsom Lake were more likely to involve collisions, inexperience, inattention, and excessive speed. Additionally, accidents occurring on holiday weekends, involving PWC, and operators 40 years of age and under were common as well.



Accidents on Lake Tahoe were more likely to involve vessel collisions, flooding/swamping incidents, rented vessels and PWC. Accidents on holiday weekends were also common. Both the percentages of operators younger than 18 and those over 40 exceeded regional and statewide totals.



Accidents Involving	Lake Tahoe	Nor CA	CA
Types			
Collision with Vessel	45%	28%	36%
Flooding/Swamping	20%	10%	12%
Type of Vessel			
Personal Watercraft	35%	23%	28%
Vessels that were			
Rented	23%	10%	10%
Operator Age			
Under 18	18%	8%	10%
Over 40	59%	42%	38%
Other Factors			
Holiday Weekends	30%	23%	23%



Summary Statistics

Northern California

2002 Northern California Boating Accident Comparison

Accidents Involving	CA	Nor CA	Delta	SF Bay	Shasta Lake	Lake Berryessa	Folsom Lake	Lake Tahoe
Types								
Capsizeing	7%	9%	2%	15%	7%	2%	0%	5%
Collision with Vessel	36%	28%	20%	12%	28%	33%	57%	45%
Collision with Object (all)	6%	7%	12%	4%	3%	0%	0%	0%
Falls Overboard	7%	8%	8%	2%	7%	7%	5%	10%
Fires (other than fuel)	6%	7%	4%	19%	5%	2%	5%	15%
Flooding/Swamping	12%	10%	12%	8%	12%	5%	5%	20%
Grounding	11%	13%	24%	25%	5%	7%	19%	0%
Water Skiing	13%	14%	13%	0%	32%	19%	5%	5%
Causes								
Excessive Speed	27%	24%	26%	8%	18%	24%	57%	30%
Hazardous Weather/Water	11%	16%	16%	10%	5%	10%	5%	5%
Machinery Failure	10%	8%	12%	12%	5%	2%	0%	0%
Operator Inattention	38%	34%	25%	19%	17%	38%	67%	35%
Operator Inexperience	36%	34%	32%	19%	33%	29%	67%	50%
Restricted Vision	6%	6%	8%	0%	0%	2%	10%	15%
Type of Vessel								
Auxiliary Sailboats	10%	6%	3%	35%	0%	0%	0%	0%
Cabin Motorboats	16%	14%	26%	33%	2%	6%	0%	10%
Houseboats	4%	7%	9%	4%	20%	2%	0%	0%
Open Motorboats	51%	57%	61%	13%	65%	50%	43%	55%
Personal Watercraft	28%	23%	13%	2%	25%	31%	76%	35%
Vessels that are								
Borrowed	25%	22%	18%	10%	14%	33%	45%	6%
Operated by Owner	51%	54%	59%	67%	33%	51%	45%	52%
Rented	10%	10%	6%	2%	33%	11%	0%	23%
Operator Age								
Under 18	10%	8%	3%	0%	5%	5%	27%	18%
40 and Under	62%	58%	51%	39%	53%	71%	87%	41%
Over 40	38%	42%	49%	61%	47%	29%	13%	59%
Other Factors								
Holiday weekends	23%	23%	25%	12%	15%	39%	29%	30%
Weekends	57%	58%	65%	48%	45%	58%	52%	55%

